

REMARKS

Claims 8-17, which were directed to a non-elected embodiment of the invention have been cancelled.

Claim 1 has been amended to replace the expression "bio-based polyol" with "a polyol based on vegetable oil, fish oil or oil derived from animal fat". Support for this amendment is found at page 5, lines 16-20 of the specification. Claim 1 has further been amended to recite that component b) is not the same as component a). Support for this amendment is found at page 5, lines 25-27 of the specification.

Each of Claims 2-6 has been amended to delete the expression "bio-based polyol" and substitute for the expression "a)" to make those claims consistent with the amendment made to Claim 1 herein.

The present invention relates to an isocyanate-reactive component useful for the production of rigid polyurethane foams by a RIM process. This isocyanate-reactive component includes: a) from 0.5 to 30% by weight, of a polyol based on vegetable oil, fish oil or an oil derived from animal fat; b) from 5 to 80% by weight of an isocyanate-reactive material different from a) and having a functionality of at least 1 and a number average molecular weight of from 400 to 10,000; c) a chain extender or crosslinking agent; d) a blowing agent; and e) a catalyst.

Pursuant to the Examiner's requirement under 35 U.S.C. § 121, Applicant confirms her election of Claims 1-7. Claims 8-17 which were directed to the non-elected embodiment of the invention have been cancelled.

Claims 1-5 were rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling with respect to all polyols based on life.

Applicant maintains that one skilled in the art would be able to determine what constitute suitable bio-based polyols from Applicant's specification. However, in an effort to advance the prosecution of this case, Applicant has amended the claims to require that component a) be a polyol based on vegetable oil, fish oil or an oil derived from animal fat.

It is believed that this amendment removes the basis for this rejection.

Withdrawal of this rejection is therefore requested.

Claims 1-5 were also rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention. The specific basis for this rejection was the expression "bio-based polyol".

Applicant has amended the claims to remove this expression. It is believed that the amendment to the claims made herein removes the basis for this rejection.

Withdrawal of this rejection is therefore requested.

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kurth (U.S. Patent 6,180,686). Applicant submits that the claims as amended herein are patentably distinct from the isocyanate-reactive compositions disclosed by Kurth.

More specifically, Kurth does not teach or suggest component b) of Applicant's claimed compositions.

It was noted in the Office Action that Applicant's components (a) and (b) were not mutually exclusive and could both read upon the blown soy oils taught by Kurth.

Applicant has amended the claims to require that components a) and b) be different. This amendment makes it clear that the present invention must include a second isocyanate-reactive material. Such second isocyanate-reactive material is neither taught nor suggested by Kurth.

Withdrawal of this rejection is therefore requested.

Claim 7 stands rejected under 35 U.S.C. § 103 as being unpatentable over Kurth (U.S. Patent 6,180,686). Applicant respectfully traverses this rejection.

Kurth discloses urethane foams produced by reacting soy oil, an isocyanate and a cross linker. "The soy oil **replaces** the polyol typically generally required in the production of urethanes." (Abstract)

It is stated in the Office Action that it would have been obvious for one having ordinary skill in the art to use the petrochemical based polyether polyols disclosed and **avoided** by Kurth in combination with the soy oil required by Kurth for the purpose of imparting relative non-degradability to the products being produced therefrom in order to arrive at the products of applicant's claims with the expectation of success in the absence of a showing of new or unexpected results. (page 5, lines 8-13).

Applicant respectfully disagrees.

To establish a proper *prima facie* case of obviousness, the Patent Office must establish that one of ordinary skill in the art would have been motivated by the teachings of the prior art to modify that prior art in the manner necessary to "arrive at" the claimed invention.

Kurth does **not** teach that the disclosed foams have a degradation problem or any undesirable property. One skilled in the art reading this disclosure would not therefore be motivated by the teachings of this reference to ignore Kurth's teaching with respect to complete replacement of known polyols and include a known polyol **in addition to** the required soy oil.

The teachings of Kurth can not therefore be properly construed in a manner which would render Applicant's claimed invention obvious.

Withdrawal of this rejection is therefore respectfully requested.

The Rim et al (U.S. Patent 4,162,276), Treadwell (U.S. Patent 4,200,699), Hirshman et al (U.S. Patent 4,136,046) and Keller et al (U.S. Patent 4,107,069) disclosures which were cited but appropriately not applied have been noted.

In view of the above amendment and remarks, reconsideration and allowance of Claims 1-7 are respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please cancel Claims 8-17.

Please amend Claims 1-6 to read as follows:

1. (Amended) An isocyanate-reactive component useful for the production of a rigid closed cell polyurethane foam by a RIM process comprising:
 - a) from 0.5 to 30% by weight, based on total weight of isocyanate-reactive component, of a polyol based on vegetable oil, fish oil or oil derived from animal fat [bio-based polyol] ,
 - b) from 5 to 80% by weight, based on total weight of isocyanate-reactive component, of an isocyanate-reactive material which is different from a) having a functionality of at least 1 and a number average molecular weight of from 400 to 10,000,
 - c) a chain extender or a crosslinking agent,
 - d) a blowing agent, and
 - e) a catalyst.
2. (Amended) The isocyanate-reactive component of Claim 1 in which up to 25% by weight of the total isocyanate reactive-component is [the bio-based polyol] a).
3. (Amended) The isocyanate-reactive component of Claim 1 in which up to 20% by weight of the total isocyanate-reactive component is [the bio-based polyol] a).
4. (Amended) The isocyanate-reactive component of Claim 1 in which at least 0.5% by weight of the total isocyanate-reactive component is [the bio-based polyol] a).
5. (Amended) The isocyanate-reactive component of Claim 1 in which at least 5% by weight of the total isocyanate-reactive component is [the bio-based polyol] a).
6. (Amended) The isocyanate-reactive component of Claim 1 in which [the bio-based polyol] a) is a blown soybean oil.